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12:13	1	ALAN CAVALLERANO	141
12:12:16	2	reduced size images in random access	
12:12:17	3	memory; correct?	
12:12:18	4	A. Yes, that's right.	
12:12:19	5	Q. And the '121 patent is not	
12:12:21	6	the first disclosure of the storage of	
12:12:23	7	reduced size images in a frame store;	
12:12:23	8	correct?	
12:12:24	9	A. That's correct.	
12:12:27	10	Q. Did Dan Beaulier invent the	
12:12:30	11	ability to transfer images directly	
12:12:33	12	from disk to random access memory?	
12:12:36	13	A. No, most certainly not.	
12:12:37	14	Q. You agree that was well	
12:12:40	15	known at the time that Dan Beaulier	
12:12:42	16	filed his patent application?	
12:12:42	17	A. Yeah.	
12:12:47	18	Q. Did Dan Beaulier invent the	
12:12:49	19	ability to transfer images directly	
12:12:51	20	from random access memory to a size	
12:12:53	21	reducer?	
12:12:54	22	MR. BEAMER: Objection;	
12:13:05	23	indefinite.	
12:13:07	24	A. Well, Mr. Beaulier, I'm	
	25	sorry, I don't know the exact	

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: 13:08 1 ALAN CAVALLERANO 142  
12:13:11 2 pronunciation of his name, I don't  
12:13:17 3 believe that he invented any of these  
12:13:20 4 specific steps that you're telling  
12:13:21 5 me -- that we're going through right  
12:13:26 6 now. However, I do feel that  
12:13:30 7 Mr. Beaulier, in my expert opinion, did  
12:13:36 8 indeed invent a unique way of -- a  
12:13:39 9 unique method of combining these steps  
12:13:42 10 and utilizing them to the benefit  
12:13:45 11 really of us, you know, in some ways of  
12:13:50 12 us all, because it invented and proved  
12:13:52 13 browse screen approach.

12:13:53 14 Q. Let's focus on the specific  
12:13:55 15 elements and on the questions I'm  
12:13:59 16 asking you. Did Dan Beaulier invent  
12:14:01 17 the ability to transfer images directly  
12:14:03 18 from random access memory to a size  
12:14:03 19 reducer?

12:14:04 20 A. No, he did not.

12:14:07 21 Q. Did Dan Beaulier invent the  
12:14:08 22 browse feature?

12:14:10 23 A. No, we know he did not.  
12:14:12 24 Well, again, always with the  
12:14:12 25 stipulation that I don't know his

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14:13 1 ALAN CAVALLERANO  
12:14:18 2 patent portfolio, but if we're talking  
12:14:20 3 about specifically from the '121  
12:14:23 4 patent, I would say no, he did not.  
12:14:28 5 Q. And he was not the first to  
12:14:31 6 browse images stored on disk; correct?  
12:14:32 7 A. That's correct.  
12:14:38 8 Q. Was Dan Beaulier first to :  
12:14:41 9 output stored images as a mosaic?  
12:14:43 10 A. No, he was not.  
12:14:46 11 Q. Did Dan Beaulier invent the  
12:14:48 12 ability to select a reduced size image  
1^ 14:50 13 in a browse in order to obtain a full  
12:14:51 14 size image?  
12:14:54 15 A. No. We know that that's  
12:14:59 16 also described in the '776 patent.  
12:15:02 17 Q. So you agree -- I'm sorry.  
12:15:02 18 A. Yes.  
12:15:04 19 Q. So you agree that was well  
12:15:06 20 known at the time that Dan Beaulier was  
12:15:07 21 working on his invention?  
12:15:07 22 A. Yes.  
12:15:10 23 Q. Did Dan Beaulier invent the  
12:15:12 24 ability to maintain a relationship  
25 between full and corresponding reduced

15:15 1

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12:15:16 2

size images?

12:15:17 3

MR. BEAMER: Objection;

12:15:21 4

vague and indefinite. Lacks

12:15:21 5

foundation.

12:15:27 6

A. Again, I would say he

12:15:29 7

invented a very special way of doing it

12:15:33 8

that improved the browse process.

12:15:35 9

Q. What specifically did Dan

12:15:39 10

Beaulier invent to maintain a

12:15:41 11

relationship between full and

12:15:45 12

corresponding reduced size images?

12:15:50 13

A. He invented a way of on

12:15:54 14

every image capture, generating a

12:15:57 15

reduced size image, transferring it

12:16:00 16

along with the full size image to disk,

12:16:03 17

with a correspondence between the two

12:16:06 18

such that if the reduced size images

12:16:10 19

were browsed, that then one would be

12:16:16 20

able to, number one, browse them in a

12:16:18 21

quicker way than what had been done

12:16:20 22

before, and number two, be able to

12:16:22 23

retrieve the full size image. Because

12:16:25 24

we know that both the reduced size

25

image and full size image resided in

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16:29 1 ALAN CAVALLERANO 145  
 12:16:34 2 frame store simultaneously. And at  
 12:16:36 3 that point, most certainly by the time  
 12:16:38 4 it went to disk, in terms of the  
 12:16:40 5 overall understanding of the '121  
 12:16:44 6 patent, that relationship and  
 12:16:46 7 correspondence needed to be there.

12:16:49 8 Q. What specifically about  
 12:16:53 9 Mr. Beaulier's system allowed the  
 12:16:55 10 system to maintain a relationship  
 12:16:59 11 between the full size and its  
 12:17:03 12 corresponding reduced size image?

12:17:09 13 A. Well, we can look at, within  
 12:17:14 14 the claim elements themselves, back to  
 12:17:20 15 the word of, for example, selective  
 12:17:24 16 transfer, where that would most  
 12:17:29 17 certainly lead one to understand that  
 12:17:33 18 if you're going to be doing a selective  
 12:17:36 19 transfer, you need to have some type of  
 12:17:37 20 a relationship.

12:17:39 21 Q. Okay, I'm not asking you  
 12:17:40 22 right now whether there was such a  
 12:17:43 23 relationship in the patent. My  
 12:17:46 24 question to you is, what specifically  
 25 about Dan Beaulier's invention enabled

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12:17:53	2	his system to maintain a relationship	
12:17:57	3	between the full size image and its	
12:17:59	4	corresponding reduced size image?	
12:18:01	5	A. Well, some of the -- one	
12:18:03	6	thing right from the start would be the	
12:18:05	7	fact that the reduced size image is	
12:18:08	8	generated automatically from the full	
12:18:15	9	sized image for all images that are	
12:18:17	10	input to the machine, and they reside	
12:18:21	11	in RAM together, for them to be	
12:18:23	12	together there is already the notion of	
12:18:26	13	some type of a relationship. And that	
12:18:28	14	then both of those are then connected	
12:18:34	15	directly to the disk store. And at	
12:18:37	16	that point there would be a direct	
12:18:40	17	relationship between the two.	
12:18:43	18	Q. Just the fact that they are	
12:18:45	19	both stored on disk means that there is	
12:18:46	20	a relationship between the full and	
12:18:47	21	reduced?	
12:18:49	22	A. The fact that they were	
12:18:51	23	captured, that the reduced size image	
12:18:57	24	was generated upon -- for every input,	
	25	for every input frame, a reduced size	

19:02 1 ALAN CAVALLERANO 147  
12:19:06 2 image was generated. And would then  
12:19:09 3 need to reside in the frame store  
12:19:12 4 simultaneously.  
12:19:14 5 In terms of the overall  
12:19:17 6 reading of the patent, one would  
12:19:20 7 understand that when you transfer that  
12:19:25 8 reduced size frame and full size frame  
12:19:28 9 to the bulk store, that you would  
12:19:30 10 naturally need to maintain a direct  
12:19:32 11 relationship.  
12:19:34 12 Q. Right. And my question to  
12:19:38 13 you is how did the system allegedly  
12:19:41 14 invented by Dan Beaulier, maintain that  
12:19:43 15 relationship between full and reduced  
12:19:45 16 size images?  
12:19:46 17 MR. BEAMER: Objection;  
12:19:50 18 asked and answered.  
12:19:52 19 A. Well, there was, if you look  
12:19:55 20 at the figure, there was a CPU, there  
12:19:57 21 was a control means, and that control  
12:20:04 22 means was able to control the transfer  
12:20:07 23 of the data and keep track of this  
12:20:08 24 association.  
25 Q. What specifically -- strike

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1 20:10 1

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12:20:10 2 that.

12:20:13 3 How specifically did the CPU  
12:20:15 4 keep track of the association between  
12:20:22 5 the full size image and the reduced  
12:20:25 6 size image in Dan Beaulier's invention?12:20:27 7 A. Well, what it would do, what  
12:20:30 8 it could do, this is an embodiment of  
12:20:33 9 the idea. I see that the CPU, again,  
12:20:35 10 I'm looking at the figure, I see the  
12:20:37 11 CPU is connected to the frame store,  
12:20:38 12 it's connected to the disk store. What  
12:20:45 13 it could do is simply keep track of --  
12:20:48 14 keep track of what it's doing. Since  
12:20:50 15 it's automatically generating the  
12:20:54 16 reduced size image and full size image  
12:20:58 17 for every input frame, it would be able  
12:21:05 18 to, if the registers or whatever  
12:21:07 19 mechanism, computer mechanism, it would  
12:21:12 20 be able to keep track of whatever --  
12:21:13 21 whatever it is. The frames could be  
12:21:18 22 given a number, for example, and a  
12:21:19 23 reduced size frame could be given an  
12:21:21 24 associated number. And both could be  
25 stored on disk and identified

21:22 1 ALAN CAVALLERANO 149  
12:21:23 2 accordingly.  
12:21:25 3 Q. Okay. And so if the full  
12:21:27 4 size image is given a number and the  
12:21:30 5 reduced size image is given a  
12:21:33 6 corresponding number, that would  
12:21:35 7 maintain the relationship that you've  
12:21:37 8 described; is that your expert opinion?  
12:21:38 9 MR. BEAMER: Objection;  
12:21:42 10 vague, overly broad, contradicts the  
12:21:45 11 previous testimony.  
12:21:50 12 A. I'm sorry, could the  
12:21:52 13 question please be repeated?  
12:21:53 14 Q. If the full size image is  
12:21:55 15 given a number and the reduced size  
12:21:58 16 image is given a corresponding number,  
12:21:59 17 that would maintain the relationship  
12:22:02 18 that you've described; is that your  
12:22:04 19 expert opinion?  
12:22:05 20 MR. BEAMER: Same objection.  
12:22:08 21 A. It could be used to indeed  
12:22:12 22 maintain a relationship. And in the  
12:22:23 23 '121 patent, that relationship is  
12:22:25 24 automatically established and  
25 maintained. . .

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135:50 1 ALAN CAVALLERANO  
12:35:54 2 is novel or unique. It's the way that  
12:35:59 3 the entire operation was taking place,  
12:36:02 4 the way the entire system was operating  
12:36:05 5 that was unique.

12:36:09 6 Q. Okay. But the particular  
12:36:10 7 operation of maintaining a relationship  
12:36:13 8 between a full size image and a reduced  
12:36:15 9 size image would have been obvious to  
12:36:17 10 one skilled in the art as of the time  
12:36:18 11 the '121 patent was filed; correct?

12:36:19 12 MR. BEAMER: Objection;  
12:36:22 13 vague, overly broad, incomplete  
12:36:24 14 hypothetical.

12:36:34 15 A. The idea of having some type  
12:36:38 16 of a relationship had to already be  
12:36:40 17 known. There were browse stream,  
12:36:42 18 editing systems, that already allowed  
12:36:45 19 one to browse. And if one were to  
12:36:46 20 browse, it would be useless to simply  
12:36:48 21 have a browse and not be able to in  
12:36:52 22 some way get back to your original, the  
12:36:54 23 image that you're looking for. That  
12:37:01 24 was prior art. That is known.

25 However, at a system level, .

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25:36 1 ALAN CAVALLERANO  
14:25:36 2 understanding.  
14:25:38 3 Q. Is it fair to say that  
14:25:39 4 Mr. Taylor is more knowledgeable about  
14:25:41 5 the Paint Box than you are?  
14:25:42 6 A. I would expect that to be  
14:25:43 7 the case.  
14:25:46 8 Q. Have you ever observed a  
14:25:48 9 Quantel Paint Box in person?  
14:25:52 10 A. I've seen a demo tape, but I  
14:25:54 11 have not actually worked with the  
14:25:58 12 Quantel Paint Box. However, I have, in  
14:26:04 13 working for CBS, I have at least been  
14:26:06 14 somewhat familiarized with different  
14:26:09 15 types of equipment that's utilized,  
14:26:13 16 used in a studio, and also just from my  
14:26:16 17 general experiences over the years,  
14:26:18 18 over the many years working in the area  
14:26:23 19 of video, I have been exposed to image  
14:26:27 20 processing type devices.  
14:26:30 21 And in fact I've actually  
14:26:32 22 been in charge of projects and programs  
14:26:38 23 at Philips where we had image  
14:26:41 24 processors that were -- that performed  
25 some of the functions that one would --

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26:46 1 ALAN CAVALLERANO 194  
14:26:50 2 that we know that the Paint Box could  
14:26:52 3 perform. And from that I do have at  
14:26:54 4 least a good amount of familiarity.  
14:26:56 5 Q. Sir, you referred to a  
14:26:58 6 videotape in that answer. Is that the  
14:27:00 7 videotape that Mr. Taylor prepared of  
14:27:01 8 the Paint Box that you're referring to?  
14:27:04 9 A. Yes, I believe that's  
14:27:04 10 correct.  
14:27:07 11 Q. Other than Mr. Taylor's  
14:27:10 12 videotape, have you ever observed the  
14:27:11 13 Paint Box?  
14:27:12 14 A. No, I have not.  
14:27:14 15 Q. Have you ever been in the  
14:27:16 16 same room with a Quantel Paint Box?  
14:27:21 17 A. I could say probably,  
14:27:26 18 probably not. I have been -- I have  
14:27:28 19 been in different studios at different  
14:27:31 20 times, and it's possible -- or at  
14:27:33 21 different trade shows over the years,  
14:27:37 22 and it's possible that I was. But not  
14:27:39 23 that -- not to the extent that I was  
14:27:41 24 aware that there was a Paint Box and I  
25 went over to it and started to use it.

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14:27:44 2

Q. Other than Mr. Taylor's

14:27:47 3

videotape, have you ever observed the

14:27:50 4

Quantel Paint Box in operation?

14:27:52 5

A. Again, not that I'm aware

14:27:55 6

of. Unless it was used as a part of

14:27:57 7

something that I was watching on

14:28:00 8

television or something of that nature.

14:28:01 9

Q. I take it then that you've

14:28:03 10

never operated the Quantel Paint Box?

14:28:04 11

A. That's correct.

14:28:05 12

Q. And you've never conducted

14:28:07 13

a detailed inspection of the Quantel

14:28:08 14

Paint Box?

14:28:12 15

A. Detailed inspection of the

14:28:14 16

actual physical unit itself, that's

14:28:16 17

correct. I have reviewed materials

14:28:17 18

related to the Paint Box.

14:28:19 19

Q. So it's correct that you've

14:28:21 20

never conducted a detailed inspection

14:28:24 21

of the actual Quantel Paint Box?

14:28:24 22

A. That's correct.

14:28:26 23

Q. And you've never inspected

14:28:30 24

the circuitry of an actual Quantel

25

Paint Box?

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28:30 1 ALAN CAVALLERANO 196  
14:28:33 2 A. Of an actual Paint Box,  
14:28:33 3 that's correct.  
14:28:35 4 Q. Did you ask your lawyers if  
14:28:38 5 you could inspect the Paint Box that is  
14:28:41 6 the subject of Mr. Taylor's video?  
14:28:43 7 A. No, I have not.  
14:28:45 8 Q. Did they tell you that that  
14:28:47 9 system was made available for  
14:28:49 10 inspection in this litigation?  
14:28:54 11 A. They may have. I don't  
14:28:58 12 recall. I can't say that I recall.  
14:29:00 13 Q. Do you think it would have  
14:29:03 14 been helpful to you to have inspected  
14:29:04 15 the Paint Box before rendering an  
14:29:08 16 opinion on the Paint Box?  
14:29:08 17 MR. BEAMER: Objection;  
14:29:10 18 vague.  
14:29:16 19 A. Generally I would say that  
14:29:19 20 my understanding of the device, my many  
14:29:21 21 years of experience in the field of  
14:29:28 22 video, would lead me to feel that I  
14:29:30 23 more or less know what it is, I can  
14:29:33 24 look at the manuals that are provided  
25 and have a good understanding of what

.. 29:35 1 ALAN CAVALLERANO 197

14:29:40 2 the product is, what the product does.

14:29:43 3 Q. Because you're comfortable

14:29:45 4 rendering an opinion on the Quantel

14:29:49 5 Paint Box without ever having actually

14:29:51 6 seen the Quantel Paint Box; is that a

14:29:51 7 fair statement?

14:29:53 8 A. Yes, that's a fair

14:29:53 9 statement.

14:29:54 10 Q. Are you an expert on the

14:29:55 11 Quantel Paint Box?

14:29:56 12 MR. BEAMER: Objection;

14:29:56 13 asked and answered.

14:29:58 14 A. Well, as we discussed, as I

14:30:00 15 presented this morning, I am an expert

14:30:02 16 in the field of video. A person who's

14:30:05 17 had many years of experience with

14:30:09 18 video. And as such I am an expert with

14:30:13 19 video type products. And that's what

14:30:15 20 my area of expertise is in.

14:30:16 21 Q. And my question to you,

14:30:19 22 sir, is, are you specifically an expert

14:30:23 23 on the Quantel Paint Box?

14:30:24 24 MR. BEAMER: This was asked

25 and answered this morning.

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14:30:34 2 A. I consider myself to be an  
14:30:36 3 expert on the product from my readings  
14:30:38 4 of the material and my general  
14:30:43 5 understanding of the video field.  
14:30:45 6 Q. And the first time you read  
14:30:47 7 any detailed materials about the Paint  
14:30:50 8 Box was February 2006?  
14:30:52 9 A. That's correct. Sometime in  
14:30:53 10 February.  
14:30:57 11 Q. So you've been familiar  
14:30:59 12 with the details regarding the Paint  
3 31:02 13 Box for a little over three months?  
14:31:03 14 A. That's correct.  
14:31:05 15 Q. And it's your belief that  
14:31:07 16 that makes you an expert on the Quantel  
14:31:08 17 Paint Box?  
14:31:09 18 MR. BEAMER: Objection;  
14:31:20 19 asked and answered, argumentative.  
14:31:22 20 A. Again, as I said, I feel  
14:31:24 21 that I am an expert in the field of  
14:31:26 22 video, and I have a lot of familiarity  
14:31:28 23 working with different types of video  
14:31:30 24 equipment. And the Paint Box would  
25 fall into that category, so I would

31:32 1 ALAN CAVALLERANO 199  
14:31:35 2 expect that I would feel comfortable  
14:31:37 3 qualifying myself as such.  
14:31:41 4 Q. Do you agree that  
14:31:43 5 Mr. Taylor is an expert on the Quantel  
14:31:44 6 Paint Box?  
14:31:44 7 A. Yes.  
14:31:45 8 MR. BEAMER: Objection;  
14:31:48 9 calls for speculation.  
14:31:50 10 Q. Sir, I want to ask you some  
14:31:54 11 questions about the Paint Box system as  
14:31:57 12 sold and demonstrated in March, April  
14:32:00 13 '82, that's the subject of Mr. Taylor's  
14:32:03 14 expert report. You are familiar with  
14:32:03 15 that report?  
14:32:04 16 A. Yes, I am.  
14:32:09 17 Q. Would you agree that the  
14:32:11 18 Paint Box could receive the video from  
14:32:12 19 an external source?  
14:32:13 20 A. Yes.  
14:32:17 21 Q. Do you agree that the Paint  
14:32:18 22 Box could receive video data  
14:32:21 23 representing full size images?  
14:32:22 24 A. Yes.  
14:32:25 25 Q. Do you agree that the Paint

32:25 1 ALAN CAVALLERANO 200

14:32:28 2 Box had multiple frame stores?

14:32:32 3 A. Yes. I know that there were

14:32:34 4 multiple frame stores, yes, that's

14:32:34 5 correct.

14:32:36 6 Q. And those frame stores were

14:32:38 7 implemented with random access memory;

14:32:39 8 correct?

14:32:41 9 A. Yes, that would be typical

14:32:44 10 that a frame store would be implemented

14:32:45 11 that way.

14:32:46 12 Q. And do you agree that

14:32:48 13 either of those frame stores could

14:32:50 14 store a full size image?

14:32:52 15 A. Yes.

14:32:54 16 Q. Do you agree that the Paint

14:32:56 17 Box had at least one disk?

14:32:58 18 A. Yes, I'm aware of that.

14:33:00 19 Q. And the disk could store

14:33:01 20 video images?

14:33:03 21 A. Yes, I'm aware of that.

14:33:05 22 Q. It could store full size

14:33:07 23 video images?

14:33:09 24 A. Yes, it could store full

25 size images.

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14:33:14 2  
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14:33:28 9  
14:33:30 10  
14:33:32 11  
14:33:34 12  
14:33:35 13  
14:33:45 14  
14:33:49 15  
14:33:56 16  
14:33:59 17  
14:34:04 18  
14:34:08 19  
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14:34:23 23  
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Q. And the Paint Box could transfer full size images from one of its frame stores to disk for storage; correct?

A. Yes, that's also correct.

Q. Do you agree that the Paint Box had a size reducer?

A. Yes, that's correct.

Q. And do you agree that the Paint Box with the use of its size reducer could generate reduced size images?

A. The Paint Box was able to reduce a full size image that was pulled off the disk and put it into, I'll call it a second frame store, where it would reside. However, at that point that reduced sized image that was only there in that second frame store would then be, I guess you would stick it on to the -- into the main frame store where that reduced sized picture, from the full size image that was pulled off the disk, would

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14:34:37 2 then reside as one composite image.

14:34:39 3 That much I am aware of, yeah.

14:34:41 4 Q. Let's put aside for a

14:34:42 5 moment what happens when you stick the

14:34:47 6 image down. We will get to that. Do

14:34:51 7 you agree that the Paint Box could

14:34:55 8 generate reduced size images?

14:34:56 9 MR. BEAMER: Asked and

14:34:56 10 answered.

14:34:59 11 A. Yes, as I stated, that's

14:34:59 12 correct.

14:35:01 13 Q. Do you agree that the Paint

14:35:03 14 Box could automatically generate

14:35:05 15 reduced size images?

14:35:06 16 MR. BEAMER: Objection;

14:35:07 17 vague.

14:35:11 18 A. Well, automatically, under

14:35:13 19 control of a user going through a

14:35:17 20 series of steps.

14:35:19 21 Q. Well, if the Paint Box

14:35:22 22 browse were used to browse full size

14:35:27 23 images stored on disk, didn't that

14:35:29 24 browse feature automatically generate

25 reduced size images?

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35:31 1 ALAN CAVALLERANO

14:35:33 2 A. It created reduced size

14:35:36 3 images from the full size images that

14:35:38 4 were on disk that would go through the

14:35:41 5 size reducer and then become a part of

14:35:46 6 the displayed frame.

14:35:49 7 Q. Okay. And in the '121

14:35:51 8 patent, the images are also passed

14:35:54 9 through a size reducer to automatically

14:35:56 10 generate the reduced size images,

14:35:58 11 according to your expert opinion;

14:35:58 12 correct?

14:35:59 13 MR. BEAMER: I'm sorry,

14:36:12 14 could you read that back.

14:36:13 15 (Record read as requested.)

14:36:14 16 MR. BEAMER: Objection;

14:36:15 17 vague.

14:36:24 18 A. I'm sorry, could you please

14:36:37 19 repeat the question?

14:36:38 20 (Record read as requested.)

14:36:46 21 A. Yes, the '121 patent, in the

14:36:49 22 '121 patent, indeed full size images

14:36:51 23 are passed through the size reducer to

14:36:53 24 create reduced size images.

25 Q. Now, you agree that the

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36:58 1 ALAN CAVALLERANO 204  
14:37:03 2 Quantel Paint Box, when it browsed full  
14:37:05 3 size images stored on disk, would  
14:37:07 4 automatically generate reduced size  
14:37:09 5 images; correct?

14:37:10 6 MR. BEAMER: Asked and  
14:37:14 7 answered.

14:37:15 8 A. Yes. And that in fact would  
14:37:21 9 be what a normal browse for a, let's  
14:37:23 10 say for a still store, that would be  
14:37:27 11 the normal mode of browsing. You would  
14:37:30 12 invoke the browse and then that would  
14:37:30 13 occur.

14:37:32 14 Q. So we both agree that the  
14:37:34 15 Paint Box could automatically generate  
14:37:36 16 reduced size images; correct?

14:37:37 17 MR. BEAMER: Asked and  
14:37:38 18 answered.

14:37:40 19 A. Yes. As I stated, it can  
14:37:43 20 reduce -- it can provide and generate  
14:37:46 21 reduced size images, taking images,  
14:37:49 22 full size images off the disk and  
14:37:52 23 putting them into the output frame  
14:37:52 24 store.

25 Q. And the Paint Box could

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37:54 1 ALAN CAVALLERANO 205  
14:37:56 2 also generate reduced size images at  
14:37:59 3 the user's option; correct?  
14:38:05 4 A. Could you, when you say the  
14:38:11 5 user's option, I need to understand  
14:38:15 6 more what -- I mean, user's option  
14:38:20 7 would be I want to see a browse screen.  
14:38:23 8 I'd like to browse these full size  
14:38:28 9 images. And you invoke the browse and  
14:38:32 10 the Paint Box would create the reduced  
14:38:33 11 size image.  
14:38:34 12 Q. All right. The user could  
14:38:38 13 use the Paint Box cut and paste  
14:38:41 14 functionality to generate reduced size  
14:38:44 15 images; correct?  
14:38:48 16 A. No, that's not correct.  
14:38:50 17 Q. Okay. So it's your expert  
14:38:52 18 opinion that the cut and paste  
14:38:54 19 functionality of the Paint Box could  
14:38:57 20 not generate reduced size images?  
14:39:01 21 A. That's correct. Because in  
14:39:07 22 order to -- when using the cut and  
14:39:09 23 paste function, we are simply creating  
14:39:54 24 a cutout of our full size image.  
25 Q. Could the Paint Box

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39:56 1 ALAN CAVALLERANO  
14:39:58 2 generate a reduced size image that was  
14:40:17 3 a small version of the full size image?  
14:40:19 4 THE WITNESS: I'm sorry,  
14:40:21 5 could you please read back the  
14:40:29 6 question.  
14:40:29 7 (Record read as requested.)  
14:40:31 8 A. Well, as we've already  
14:40:33 9 discussed for the browse screen, we  
14:40:37 10 know that the full size image stored on  
14:40:40 11 disk can go through the size reducer  
14:40:45 12 and that that resulting reduced size  
14:40:48 13 image then becomes a part of a browse  
14:40:57 14 screen. And that that's a reduced size  
14:40:59 15 image that the Paint Box is able to  
14:41:00 16 create that way.  
14:41:02 17 Q. Right. So we both agree  
14:41:03 18 that the Paint Box could use its size  
14:41:07 19 reducer to generate a reduced size  
14:41:07 20 image; correct?  
14:41:10 21 A. Yes, in the way that -- in  
14:41:12 22 the way that I've described, yes.  
14:41:14 23 Q. And that reduced size image  
14:41:16 24 could be stored in either of the frame  
25 stores; correct?

41:18 1 ALAN CAVALLERANO 207  
14:41:20 2 MR. BEAMER: Objection.  
14:41:29 3 A. That reduced sized image  
14:41:31 4 most certainly could be stored in the  
14:41:35 5 output frame store. And it's  
14:41:38 6 temporarily present in the second frame  
14:41:39 7 store.  
14:41:43 8 Q. And that reduced size image  
14:41:45 9 could be stored in the random access  
14:41:47 10 memory of the Paint Box; correct?  
14:41:49 11 A. Yes, that's correct, the  
14:41:54 12 frame store is the random access  
14:41:55 13 memory.  
14:41:56 14 Q. And the reduced size image  
14:41:58 15 could be stored in one frame store  
14:42:01 16 while a full size image was in the  
14:42:02 17 other frame store; correct?  
14:42:03 18 MR. BEAMER: Objection;  
14:42:16 19 vague.  
14:42:19 20 A. When we say stored, it's  
14:42:21 21 stored temporarily so that it can then  
14:42:26 22 be stuck on to the output frame store.  
14:42:28 23 Q. But regardless of whether  
14:42:31 24 in your opinion it's temporary or not,  
. 25 you agree that the Paint Box could

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42:33 1

ALAN CAVALLERANO

14:42:36 2 store a reduced size image in one frame

14:42:39 3 store and a full size image in another

14:42:40 4 frame store; correct?

14:42:41 5 MR. BEAMER: Objection;

14:42:45 6 vague, asked and answered.

14:42:49 7 A. As I stated, the Paint Box

14:42:56 8 was capable of generating a reduced

14:42:59 9 size image under manual control of the

14:43:04 10 user, and having that reduced size

14:43:07 11 image reside temporarily in the second

14:43:17 12 frame store while something else is

14:43:20 13 present in the display frame store.

14:43:23 14 Q. So the Paint Box could

14:43:28 15 store a full and a reduced size image

14:43:30 16 in random access memory simultaneously;

14:43:31 17 correct?

14:43:31 18 MR. BEAMER: Objection;

14:43:35 19 vague, incomplete hypothetical.

14:43:39 20 A. It could only store it as

14:43:45 21 part of an overall operation that the

14:43:48 22 user is invoking. It could not store

14:43:51 23 it in the same sense as being stored

14:43:55 24 simultaneously in the '121 patent. I

25 can envision many instances where

44:02 1 ALAN CAVALLERANO  
14:44:04 2 anything at all can be in two separate  
14:44:07 3 frame stores, nothing is necessarily  
14:44:12 4 precluding that. But it's a matter of  
14:44:19 5 the entire operation and how that  
14:44:23 6 reduced size image got there, that's of  
14:44:25 7 significance to me with regard to my  
14:44:27 8 analysis of that.

14:44:29 9 Q. But you agree, sir, do you  
14:44:31 10 not, that the Paint Box could  
14:44:35 11 simultaneously store one full size  
14:44:37 12 image and one reduced size image in its  
14:44:40 13 frame stores simultaneously; correct?

14:44:41 14 MR. BEAMER: Asked and  
14:44:42 15 answered.

14:44:43 16 MR. SUMMERSGILL: Strike  
14:44:46 17 that. Because I said simultaneously  
14:44:48 18 twice. Let me try it again.

14:44:49 19 THE WITNESS: Okay.

14:44:50 20 Q. You agree, sir, do you not,  
14:44:52 21 that the Paint Box could store a full  
14:44:55 22 size image and a reduced size image in  
14:44:57 23 its frame stores simultaneously;  
14:44:58 24 correct?

25 MR. BEAMER: Asked and

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44:59 1

ALAN CAVALLERANO

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14:45:02 2 answered, vague.

14:45:06 3 A. As I've stated, through a  
14:45:08 4 particular series of steps, it's  
14:45:11 5 possible to have the reduced size image  
14:45:14 6 temporarily in one frame store. And  
14:45:18 7 the full size counterpart present in  
14:45:22 8 the other, the display frame store.

14:45:23 9 Q. Now, do you agree that the  
14:45:25 10 Paint Box could output images from disk  
14:45:27 11 to its frame stores?

14:45:31 12 A. Yes.

14:45:34 13 Q. And it could output full  
14:45:35 14 size images?

14:45:36 15 A. Yes, that's correct.

14:45:40 16 Q. And it could output images  
14:45:43 17 from disk upon a user's command?

14:45:46 18 A. Yes, I believe that's  
14:45:46 19 correct.

14:45:56 20 Q. Do you agree that the Paint  
14:45:59 21 Box frame stores had input ports?

14:45:59 22 A. Yes.

14:46:01 23 Q. Do you agree that the Paint  
14:46:04 24 Box frame stores had separate output  
25. ports?

53:07 1 ALAN CAVALLERANO 216

14:53:15 2 the input port. And the element 1 of

14:53:25 3 claim 8 is simply telling me that I

14:53:27 4 need to be able to do that to the input

14:53:28 5 port of the device.

14:53:29 6 Q. But you know that just

14:53:31 7 because it's random access memory;

14:53:33 8 correct?

14:53:34 9 MR. BEAMER: Objection;

14:53:41 10 argumentative.

14:53:43 11 A. Yes. Because it's random

14:53:45 12 access memory, I would expect it to

14:53:47 13 have an input port and an output port.

14:53:49 14 Q. So what does the addition

14:53:52 15 of the words an input port and an

14:53:54 16 output port add to the meaning of the

14:53:56 17 first element of claim 8?

14:53:58 18 MR. BEAMER: Asked and

14:53:58 19 answered.

14:54:00 20 A. As I've said, it doesn't

14:54:02 21 have any particular significance to me.

14:54:05 22 Q. Now, in any event, you

14:54:12 23 agree that the Paint Box has the input

14:54:16 24 port and an output port requirement

25. that's set forth in the first element

54:18 1 ALAN CAVALLERANO  
14:54:20 2 of claim 8; correct?  
14:54:24 3 A. Yes. As would many,  
14:54:27 4 basically every or many other such  
14:54:28 5 devices. Yes, that's correct.  
14:54:30 6 Q. You agree that the Paint  
14:54:31 7 Box had a computer that controlled the  
14:54:33 8 system functions?  
14:54:33 9 A. Yes.  
14:54:36 10 Q. Controlled the transfer of  
14:54:39 11 images from RAM to disk?  
14:54:41 12 A. Yes, that's correct.  
14:54:43 13 Q. The Paint Box computer  
14:54:44 14 controlled the generation of reduced  
14:54:47 15 size images?  
14:54:51 16 A. Through operator commands,  
14:54:52 17 yes, that's correct.  
14:54:55 18 Q. And the Paint Box computer  
14:55:09 19 controlled the transfer of reduced size  
14:55:12 20 images from the Paint Box size reducer  
14:55:15 21 to random access memory; correct?  
14:55:17 22 A. Yes, that's correct.  
14:55:18 23 Q. Do you agree that the  
14:55:21 24 transfer of reduced size images from  
25. the size reducer to Paint Box random

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55:25 1 ALAN CAVALLERANO

14:55:27 2 access memory was direct?

14:55:29 3 A. I'm sorry, could you please

14:55:29 4 read back the question?

14:55:31 5 Q. Do you agree that the

14:55:34 6 transfer of reduced size images from

14:55:37 7 the size reducer to random access

14:55:41 8 memory was direct in the Quantel Paint

14:55:41 9 Box?

14:55:44 10 A. I believe that the image

14:55:50 11 from the size reducer would, in the

14:55:53 12 case of the browse, those images would

? 14:55:56 13 go directly to the random access

14:56:02 14 memory. And in the case we were

14:56:05 15 describing before, where the user

14:56:11 16 invokes its size reduction, yes, that

14:56:12 17 that is the case.

14:56:16 18 Q. Okay. So reduced size

14:56:17 19 images in the Paint Box could be

14:56:19 20 transferred directly from the size

14:56:22 21 reducer to random access memory;

14:56:28 22 correct?

14:56:30 23 A. Yes. And that would be --

14:56:33 24 we know that from the prior art as

25 well. For example, in the '776 patent,

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56:39 1 ALAN CAVALLERANO 219  
14:56:48 2 we know that -- I'm sorry, we were  
14:56:50 3 talking about going from the disk to  
14:56:52 4 the random access memory?  
14:56:53 5 Q. I was asking you about the  
14:56:56 6 transfer from size reducer to random  
14:57:02 7 access memory.  
14:57:04 8 A. Yes, we know that, as in the  
14:57:12 9 case of the figure 19 in the -- I just  
14:57:14 10 want to make sure, I'm just looking at  
14:57:20 11 the figure. Figure 18. We know that  
14:57:23 12 we have a direct transfer from -- this  
14:57:25 13 is in the '776 patent, of the size  
14:57:29 14 reducer to the random access memory at  
14:57:30 15 the frame store, yes, that's correct.  
14:57:32 16 Q. So do you agree that the  
14:57:34 17 Quantel Paint Box could transfer images  
14:57:38 18 directly from the size reducer to the  
14:57:39 19 random access memory?  
14:57:40 20 A. Yes, that's correct.  
14:57:41 21 Q. And do you agree that the  
14:57:43 22 Paint Box could transfer images  
14:57:48 23 directly from the disk to random access  
14:57:49 24 memory?  
25 MR. BEAMER: Read that back,

1 10:17 1

ALAN CAVALLERANO

15:00:18 2 that the Paint Box filter card

15:00:21 3 contained random access memory?

15:00:21 4 MR. BEAMER: Objection;

15:00:22 5 vague.

15:00:24 6 A. I believe it did. I would

15:00:27 7 need to look at the manual to be sure

15:00:31 8 that that's the type of memory that it

15:00:31 9 had.

15:00:35 10 Q. Was the transfer from disk

15:00:38 11 to the random access memory of the

15:00:41 12 filter card a direct transfer?

15:00:45 13 A. It's my understanding that

15:00:49 14 it would be.

15:00:53 15 Q. Now, the Paint Box frame

15:00:57 16 store could also output video images

15:00:59 17 for display on the Paint Box frame

15:01:00 18 store; correct?

15:01:01 19 A. Yes, that's right.

15:01:04 20 Q. The Paint Box with the use

15:01:08 21 of its combiner, could access a reduced

15:01:10 22 size image stored at one frame store

15:01:13 23 and a full size image stored at another

15:01:21 24 frame store simultaneously; correct?

25 THE WITNESS: I'm sorry,

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1 07:40 1 ALAN CAVALLERANO 228  
15:07:44 2 access one reduced size image and one  
15:07:46 3 full size image simultaneously;  
15:07:54 4 correct?  
15:07:56 5 A. Yes, as I would expect.  
15:07:57 6 Q. And you agree --  
15:07:58 7 MR. BEAMER: Are you done  
15:07:59 8 with your answer?  
15:08:00 9 A. As I would expect for  
15:08:03 10 products of this nature, it most  
15:08:05 11 certainly would be possible to have,  
15:08:08 12 and I would expect, some type of a  
15:08:10 13 combiner circuit that would perform  
15:08:12 14 that type of an operation.  
15:08:15 15 Q. So that was well known in  
15:08:15 16 the art?  
15:08:17 17 A. Yes, that was well known in  
15:08:17 18 the art.  
15:08:19 19 Q. Now, you agree that the  
15:08:21 20 Paint Box had a browse feature.  
15:08:24 21 A. Yes, I'm familiar with that.  
15:08:25 22 Q. And you agree that the  
15:08:27 23 Paint Box could store multiple reduced  
15:08:31 24 size images in random access memory?  
25 MR. BEAMER: Read that back,

09:35 1 ALAN CAVALLERANO 267

16:09:36 2 Q. Sir, before the break you

16:09:38 3 were describing the process by which an

16:09:41 4 operator using the Paint Box could put

16:09:45 5 a rectangle around the reduced size

16:09:47 6 image in the frame store and save only

16:09:51 7 the pixels corresponding to that image

16:09:53 8 to disk; is that correct?

16:09:59 9 A. I was referring to using the

16:10:02 10 rectangle function to select those

16:10:08 11 pixels which were from the -- which

16:10:11 12 were from the full size image which was

16:10:13 13 reduced and stuck on to the full size

16:10:16 14 image to create a new composite full

16:10:18 15 size image and using the rectangle

16:10:19 16 function for that operation, yes.

16:10:21 17 Q. When the operator places

16:10:26 18 the rectangle over the pixels that

16:10:31 19 represent the reduced size image, or

16:10:33 20 what you call part of the full size

16:10:35 21 image, only the pixels within that

16:10:38 22 rectangle are saved to disk; correct?

16:10:40 23 MR. BEAMER: Objection.

16:10:44 24 A. That's my understanding.

16:10:44 25 Q. So assuming that you

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10:47 1 ALAN CAVALLERANO  
16:10:50 2 generated a reduced size image using  
16:10:54 3 the '121 patent that started on disk,  
16:10:56 4 then assuming you've taken the same  
16:11:00 5 full size image and generated a reduced  
16:11:02 6 size image on the Paint Box and used  
16:11:05 7 the rectangle function to store the  
16:11:07 8 pixels corresponding to that image to  
16:11:11 9 the disk, at that point is there any  
16:11:14 10 difference between the pixels of the  
16:11:19 11 reduced sized image in the '121 system  
16:11:22 12 disk versus the pixels of the reduced  
16:11:25 13 sized image on a Paint Box disk?  
16:11:26 14 MR. BEAMER: Objection;  
16:11:32 15 incomplete hypothetical.  
16:11:34 16 A. Well, again, if we're  
16:11:37 17 focusing on strictly the pixel data and  
16:11:40 18 not the process that got us there, and  
16:11:45 19 if I were to also disregard the  
16:11:48 20 potential that the rectangle did not  
16:11:51 21 exactly register over what you're  
16:11:53 22 calling the reduced sized image and  
16:11:56 23 what I'm calling certain pixel values  
16:11:59 24 within the full size image, there is no  
25 reason for me to believe that there

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12:00 1 ALAN CAVALLERANO  
16:12:03 2 would be any difference or significant  
16:12:07 3 difference, other than as well what we  
16:12:10 4 had already discussed about the quality  
16:12:13 5 or operations within the size reducer,  
16:12:15 6 as to how it actually performed that  
16:12:19 7 generation of the reduced sized image.

16:12:22 8 Q. So putting aside how you --  
16:12:23 9 strike that.

16:12:25 10 Putting aside how an  
16:12:27 11 operator got to this point, a reduced  
16:12:29 12 sized image stored on the Paint Box  
16:12:32 13 disk is the same as a reduced sized  
16:12:34 14 image stored on the '121 system disk;  
16:12:35 15 is that correct?

16:12:36 16 MR. BEAMER: Objection;  
16:12:38 17 asked and answered.

16:12:40 18 A. As I've stated, that is  
16:12:45 19 correct. I would not particularly  
16:12:48 20 characterize what's being stored in the  
16:12:50 21 disk of the Paint Box as being a  
16:12:53 22 reduced size image. But if I were to  
16:12:56 23 do a comparison of that particular  
16:13:00 24 cutout that's stored on the disk of the  
25 Paint Box and compare it to the actual

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13:05 1 ALAN CAVALLERANO 270  
16:13:08 2 reduced size image that would be  
16:13:11 3 resulting from the '121 patent, I would  
16:13:14 4 expect those pixel values to correlate.  
16:13:17 5 Q. Now, you mentioned the  
16:13:20 6 possibility that the operator in  
16:13:23 7 placing the rectangle function over the  
16:13:27 8 reduced size image could miss and  
16:13:30 9 capture additional pixels. Do you  
16:13:31 10 recall that?  
16:13:32 11 A. Yes, that's correct.  
16:13:37 12 Q. If the operator misses with  
16:13:41 13 a rectangle and captures -- strike  
16:13:41 14 that.  
16:13:43 15 If the operator misses with  
16:13:47 16 the rectangle and slices out some of  
16:13:51 17 the pixels of that reduced size image  
16:13:56 18 when he is storing that image to disk,  
16:14:00 19 is it the same image as what's been  
16:14:01 20 stored on the '121 disk?  
16:14:02 21 MR. BEAMER: Objection;  
16:14:14 22 vague, incomplete hypothetical.  
16:14:16 23 A. I'm sorry, could you please  
16:14:23 24 repeat the question?  
25 Q. In paragraph 139 of your

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50:39 1 ALAN CAVALLERANO 300

16:50:42 2 reduced size images are generated from

16:50:44 3 full size images that have already been

16:50:45 4 stored on disk; correct?

16:50:47 5 A. Well, I don't view the

16:50:54 6 cutouts as being reduced sized images.

16:50:56 7 Those are cutouts that are stored in

16:50:57 8 the Paint Box.

16:50:58 9 Q. Let's assume for a moment

16:51:01 10 that the cutouts are reduced sized

16:51:04 11 images. With that assumption in mind,

16:51:07 12 the Paint Box generation of reduced

16:51:10 13 size images from full size images that

16:51:12 14 have been stored on disk is covered by

16:51:15 15 the invention of the '121 patent;

16:51:16 16 correct?

16:51:17 17 MR. BEAMER: Objection;

16:51:18 18 incomplete hypothetical and lacks

16:51:25 19 foundation.

16:51:27 20 A. The '121 patent teaches an

16:51:36 21 entire process whereby we need to --

16:51:43 22 whereby we need to go directly from the

16:51:49 23 disk to the frame store without passing

16:51:53 24 through the size reducer. So I don't

16:51:53 25 believe that the scenario you just

1 59:27 1 ALAN CAVALLERANO 307  
16:59:30 2 Q. And that scenario,  
16:59:32 3 according to the expert opinion set  
16:59:34 4 forth in your expert report, is covered  
16:59:37 5 by the invention of the '121 patent;  
16:59:37 6 correct?  
16:59:38 7 A. That's correct.  
16:59:41 8 Q. So the '121 patent does not  
16:59:43 9 require the generation of reduced size  
16:59:46 10 images prior to the storage of the full  
16:59:49 11 size image on disk; does it?  
16:59:50 12 MR. BEAMER: Objection;  
16:59:51 13 lacks foundation.  
16:59:54 14 A. No, it does not.  
16:59:57 15 Q. Now, sir, we've discussed  
17:00:00 16 the Paint Box browse earlier. Do you  
17:00:01 17 recall that?  
17:00:02 18 A. Yes.  
17:00:04 19 Q. You agree that the Paint  
17:00:05 20 Box had a browse feature?  
17:00:06 21 A. Yes, that's correct.  
17:00:12 22 Q. And you agree that the  
17:00:14 23 Paint Box with the use of its cut and  
17:00:17 24 paste function could create cutouts?  
25 A. That's correct.

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1 00:18 1 ALAN CAVALLERANO 308  
17:00:20 2 Q. And the Paint Box could  
17:00:25 3 reduce the size of those cutouts;  
17:00:25 4 correct?  
17:00:25 5 A. That's correct.  
17:00:27 6 Q. And the Paint Box could  
17:00:31 7 store those reduced size cutouts to  
17:00:31 8 disk; correct?  
17:00:34 9 MR. BEAMER: Objection.  
17:00:37 10 A. The Paint Box could store  
17:00:41 11 cutouts to disk.  
17:00:42 12 Q. And the Paint Box could  
17:00:45 13 then browse cutouts that were stored on  
17:00:46 14 disk; correct?  
17:00:47 15 A. Yes, that's correct.  
17:00:49 16 Q. And it could browse reduced  
17:00:52 17 size cutouts that were stored on disk;  
17:00:53 18 correct?  
17:00:54 19 A. Yes, that's my  
17:01:01 20 understanding.  
17:01:03 21 Well, when we say reduced  
17:01:08 22 sized cutouts, though, what we're  
17:01:14 23 talking about are cutouts. They are  
17:01:16 24 still cutouts.  
25 Q. Well, cutouts can be

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01:17 1

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17:01:19 2

reduced in size; correct?

17:01:20 3

A. Yes, it's my understanding

17:01:22 4

that you would be able to pull up a

17:01:26 5

cutout and manipulate it, for example,

17:01:28 6

reducing it in size.

17:01:33 7

Q. And after you reduce it in

17:01:36 8

size, you can store that cutout to disk

17:01:38 9

on the Paint Box; correct?

17:01:40 10

A. That's my understanding,

17:01:40 11

yes.

17:01:43 12

Q. And then using the Paint

17:01:45 13

Box browse function, you can browse

17:01:47 14

through cutouts that are stored on

17:01:48 15

disk; correct?

17:01:50 16

A. Yes, that's correct.

17:01:53 17

Q. And that's set forth in the

17:01:59 18

Paint Box manual guide; correct?

17:01:59 19

Strike that.

17:02:00 20

That's set forth in the

17:02:02 21

Paint Box user guide; correct?

17:02:04 22

A. Yes, I have reviewed that

17:02:07 23

document, I believe that -- I know that

17:02:15 24

that is correct, yes.

25

Q. And as far as you know, the

02:16 1 ALAN CAVALLERANO 310  
17:02:18 2 Paint Box user guide describes the  
17:02:20 3 operations of the Paint Box accurately;  
17:02:21 4 correct?  
17:02:23 5 A. To the best of my knowledge  
17:02:24 6 and understanding, yes, that's correct.  
17:02:27 7 Q. You don't have any reason  
17:02:29 8 to believe that the Paint Box user  
17:02:31 9 guide does not accurately describe the  
17:02:34 10 operations of the Quantel Paint Box;  
17:02:34 11 correct?  
17:02:40 12 A. That's correct.  
17:02:45 13 Q. Now, you reviewed  
17:02:47 14 Mr. Taylor's videotape that he attached  
17:02:49 15 to his expert report; correct?  
17:02:50 16 A. Yes, that's correct.  
17:02:51 17 Q. And do you recall on that  
17:02:54 18 videotape that Mr. Taylor demonstrated  
17:02:58 19 the browse of reduced size cutouts?  
17:02:59 20 A. Yes, I do recall. I believe  
17:03:01 21 that was at the end.  
17:03:02 22 Q. Yes, close to the end,  
17:03:03 23 that's correct.  
17:03:03 24 A. Yes.  
25 Q. Do you recall he also

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03:05 1 ALAN CAVALLERANO 311  
17:03:07 2 demonstrated the browse of full size  
17:03:10 3 images that were stored on disk?  
17:03:12 4 A. Yes, I do recall.  
17:03:14 5 Q. And do you recall that the  
17:03:18 6 browse of the reduced size cutouts was  
17:03:20 7 faster than the browse of the full size  
17:03:21 8 images?  
17:03:25 9 A. Yes, I recall that. I would  
17:03:27 10 expect that that could be the case.  
17:03:30 11 Q. Why is the browse of the  
17:03:34 12 cutouts in the Taylor video faster than  
17:03:36 13 the browse of the full size images?  
17:03:39 14 A. Well, the browse of the full  
17:03:45 15 size images requires, as in figure 18  
17:03:49 16 of the '776 patent, for every reduced  
17:03:53 17 size image that becomes a part of the  
17:03:56 18 edit screen or part of the browse, must  
17:03:58 19 come from a disk, go through the size  
17:04:03 20 reducer, and then be inserted into the  
17:04:05 21 output, the frame store for output.  
17:04:09 22 And therefore we know that that's the,  
17:04:13 23 what I'll call the slow browse  
17:04:15 24 approach, that was prior art, for  
25 example, to the '121 patent, and we all

J 12:05 1

ALAN CAVALLERANO

17:12:09 2 pulling off the amount of data for  
17:12:11 3 these individual pieces.17:12:14 4 Q. So one of the reasons the  
17:12:20 5 Paint Box browse cutouts is faster than  
17:12:22 6 the Paint Box browse of full size  
17:12:24 7 images, is because the cutouts contain  
17:12:27 8 less data than the full size images;  
17:12:34 9 correct?17:12:35 10 A. Yes. Because again, what  
17:12:37 11 bogs down the system is needing to pull  
17:12:39 12 off the full size image. And in fact  
17:12:43 13 that's what is such a benefit of the  
17:12:45 14 '121 system, where you don't need to be  
17:12:47 15 able -- where you don't need to pull  
17:12:50 16 off the full size image and send it  
17:12:59 17 through the size reducer each time.17:13:02 18 Q. Now, you agree that the  
17:13:05 19 demonstration that Mr. Taylor showed on  
17:13:08 20 his videotape could actually be done on  
17:13:10 21 the Quantel Paint Box; correct?17:13:13 22 A. I have no reason to think  
17:13:17 23 that an operator couldn't set up the  
17:13:23 24 steps to be able to create that -- to  
25 be able to create that effect.

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17:14:53 15  
17:14:57 16  
17:14:59 17  
17:15:03 18  
17:15:06 19  
17:15:09 20  
17:15:12 21  
17:15:17 22  
17:15:23 23  
17:15:28 24  
17:15:30 25

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Q. Now, when the Paint Box browses full size images, the operator can then select one of the resulting reduced size images in the browse in order to obtain the full size image; correct?

A. We are talking about for the Paint Box?

Q. Yes.

A. Yes, that's correct.

Q. So in the Paint Box, when an operator selects a reduced size image in the browse in order to obtain a full size image corresponding to that reduced size image, is there a working relationship between the browsed image and its corresponding full sized image?

A. For that moment in time, yes. Because the full size image went through -- went through the size reducer and a browse screen was created. And then there would be a way to go from the reduced sized image that's in the browse screen to, back to

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15:30 1 ALAN CAVALLERANO 320  
17:15:33 2 the full sized image. And of course  
17:15:34 3 that's really what the prior art  
17:15:36 4 systems all allowed you to do that,  
17:15:40 5 otherwise the notion of browsing really  
17:15:43 6 wouldn't -- it wouldn't work, because  
17:15:46 7 then you wouldn't be -- you wouldn't be  
17:15:47 8 browsing.  
17:15:49 9 Q. Now, sir, we talked earlier  
17:15:54 10 about the embodiment of, Mr. Beaulier's  
17:15:56 11 embodiment of the '121 system, which  
17:16:00 12 was the ESS-3 system. Do you recall  
17:16:01 13 that?  
17:16:10 14 A. I'm not sure when we  
17:16:11 15 discussed that. Sorry.  
17:16:13 16 Q. Fair enough. We may not  
17:16:17 17 have used the term ESS-3.  
17:16:26 18 The system designed by  
17:16:28 19 Mr. Beaulier, in your expert opinion,  
17:16:29 20 maintained a relationship between full  
17:16:33 21 and reduced size images by assigning a  
17:16:36 22 number to the reduced size image that  
17:16:37 23 correlated with the number assigned to  
17:16:40 24 the full size image; correct?  
25 A. In a particular example, one

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18:30:30 2 ways similar discussion as for the  
18:30:40 3 Paint Box.

18:30:40 4  
18:30:42 5 MR. SUMMERSGILL: I have  
18:30:46 6 just a few more questions, then I'll  
let Mr. Beamer ask some questions.

18:30:49 7 Q. In paragraph 40 of your  
18:30:54 8 expert report -- strike that.

18:30:55 9  
18:30:59 10 Do you agree that all of the  
18:31:02 11 components of the '121 patent were  
known in the art?

18:31:03 12  
18:31:05 13 MR. BEAMER: Objection;  
overly broad.

18:31:06 14 A. Well, what I know is that  
18:31:11 15 the '121 patent is an improvement over  
18:31:19 16 what was then the state of the art. So  
18:31:22 17 what is -- what's improved is the  
18:31:28 18 method of operation, and not the actual  
18:31:34 19 elements themselves. So that's  
18:31:34 20 correct.

18:31:37 21 Q. Now, in paragraph 30 of  
18:31:43 22 your expert report, you indicate that  
18:31:45 23 the invention would increase the  
24 marketability of digital cameras.

25 Do you see that?

1 ALAN CAVALLERANO

2 C E R T I F I C A T E

3 STATE OF NEW YORK )

4 : ss.

5 COUNTY OF NEW YORK )

6

7 I, ERIC J. FINZ, a Shorthand  
8 Reporter and Notary Public within and  
9 for the State of New York, do hereby  
certify:

10 That ALAN CAVALLERANO, the witness  
11 whose deposition is hereinbefore set  
12 forth, was duly sworn by me and that  
13 such deposition is a true record of the  
14 testimony given by the witness.

15 I further certify that I am not  
16 related to any of the parties to this  
17 action by blood or marriage, and that I  
18 am in no way interested in the outcome  
19 of this matter.

20 IN WITNESS WHEREOF, I have hereunto  
21 set my hand this 8 day of  
22 May, 2006.

23 CERTIFIED ORIGINAL  
24 LEGALINK BOSTON

25 ERIC J. FINZ